

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) An ablative composition, comprising:

a sprayable ablative material adapted to be sprayed onto a surface;

an intumescent material intermixed with at least a portion of the sprayable ablative material to form a sprayable ablative composition; ~~and wherein the sprayable ablative composition~~ [[is]] adapted to form a thermal protection layer for the surface;

wherein the intumescent material is intermixed with only a portion of the thickness of the sprayable ablative material, and the intumescent material is intermixed in different quantities, to be applied in successive layers to the surface, so that the ablative composition is formed by a series of layers with the layers each having a different concentration of said intumescent material mixed therein.

2. (Canceled)

3. (Previously Presented) The ablative composition of claim 1, wherein different quantities of said intumescent material are intermixed with said ablative material at different depths within the thermal protection layer of the ablative composition.

4. (Canceled)

5. (Previously Presented) The ablative composition of claim 1, wherein the intumescent material is operable to be intermixed in different quantities, and operable to be applied in successive layers to the surface, so that the ablative composition is operable to be formed by a series of layers with an outermost layer having a maximum concentration of said intumescent material intermixed therein.

6. (Previously Presented) The ablative composition of claim 1, wherein the intumescent material is between about 10 percent to 50 percent by weight of the ablative composition.

7. (Previously Presented) The ablative composition of claim 1, wherein the intumescent material is between about 25 percent to about 30 percent by weight of the ablative composition.

8. (Previously Presented) The ablative composition of claim 1, wherein the ablative composition forms a layer that has an overall thickness of between about 0.05 inch (1.27mm) and 0.75 inch (19.05mm).

9. (Previously Presented) The ablative composition of claim 8, wherein the ablative composition forms a layer that has an overall thickness of approximately 0.25 inches.

10. (Original) The ablative composition of claim 1, wherein the intumescent material comprises ammonium polyphosphate.

11. (Original) The ablative composition of claim 1, wherein the ablative material comprises a cork-based material.

12. (Original) The ablative composition of claim 1, wherein the ablative material comprises epoxy.

13. (Currently Amended) An ablative composition comprising:

a first quantity of a sprayable ablative material operable to be applied to a surface to form a first sprayed-on ablative layer;

an intumescent material intermixed with a second quantity of said sprayable ablative material and operable to be applied as a second sprayed-on ablative layer on said first sprayed-on ablative layer; and

a plurality of layers comprising said intumescent material and said ablative material, each of the plurality of layers including different concentrations of said intumescent material, and each layer of the plurality of layers has a successively greater concentration of said intumescent material, wherein an outermost layer has a maximum concentration of said intumescent material; and

wherein said first sprayed-on ablative layer, said second sprayed-on ablative layer and said plurality of layers~~and second sprayed-on ablative layers~~ cooperatively form said ablative composition.

14. (Previously Presented) The ablative composition of claim 13, wherein the intumescent material comprises about 10 percent to about 50 percent of an overall weight of said ablative composition.

15. – 16. (Canceled)

17. (Currently Amended) The ablative composition of claim ~~[[16]]~~13, wherein of the plurality of layers comprising said intumescent material and said ablative material an outermost layer has a maximum concentration of said intumescent material.

18. (Canceled)

19. (Original) The ablative composition of claim 13, wherein the intumescent material comprises ammonium polyphosphate.

20. (Original) The ablative composition of claim 13, wherein the ablative material comprises a cork-based material.

21. (Original) The ablative composition of claim 13, wherein the ablative material comprises epoxy.

22. - 26. (Canceled)